

Claims

1. Method of surface treatment of friction members, particularly brake discs/drums or clutch plates in vehicles comprising steps of
 - providing friction members made of PMMC material by any conventional method known per se,
 - in situ formation of a transfer layer on the active surface of the member by removing to a predetermined extent the top layer of the matrix material hereby exposing the surface of the embedded reinforcing particles to a degree providing a transfer layer with increased thickness and stability.
2. Method according to claim 1,
c h a r a c t e r i z e d i n t h a t
the in situ formation of the transfer layer is conducted by means of chemical etching of the PMMC material.
3. Method according to claim 2,
c h a r a c t e r i z e d i n t h a t
sodium hydroxide (NaOH) in concentrations from 5 to 30% is applied as the etching agent.
4. Method according to claim 2,
c h a r a c t e r i z e d i n t h a t
acid reagent is applied as the etching agent.
5. Method according to claim 2,
c h a r a c t e r i z e d i n t h a t
KOH is applied as the etching agent.

6. Method according to claim 1,
characterized in that
the in situ formation of the transfer layer is done by electrochemical pickling of
the PMMC material.
7. Friction member, particularly a brake disc/rotor in an automotive vehicle,
characterized in that
the member comprising a PMMC body of Al-alloy reinforced by ceramic particles
is provided with a surface topography characterized by surface protruding
reinforcing particles, said particles becoming an integrated part of the transfer
layer.
8. Member according to claim 7,
characterized in that
the Al-alloy is an AlSi alloy reinforced by SiC particles.

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